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			THE STATE OF THE PARTY OF	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
_	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		0447		
	09/606,678	06/30/2000	Yoshikazu Nishii	Q59992	8447		
	• •	90 07/17/2003 7 7 inn Macneak & Seas	EXAMINER				
Sughrue Mion Zinn Macpeak & Seas 2100 Pennsylvania Avenue N W Washington, DC 20037-3202				THORNTON, KRISANNE MARIE			
	w asimigion, D	0 2000, 0200		ART UNIT	PAPER NUMBER		
				1744	3		
				DATE MAILED: 07/17/200	1/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

			<b>-</b> )			M			
		Application No.		Applicant(s)					
		09/606,678		NISHII ET AL.					
Office Action Sun	nmarv	Examiner		Art Unit					
Office Action Sun	a. y	Krisanne M. Thornt	on	1744					
Th MAILING DATE of th	is communication app	ears on the cover s	heet with the	orrespondenc a	ddress				
Period for Reply									
A SHORTENED STATUTORY THE MAILING DATE OF THIS  - Extensions of time may be available unde after SIX (6) MONTHS from the mailing d  - If the period for reply specified above is le  - If NO period for reply is specified above, i  - Failure to reply within the set or extended  - Any reply received by the Office later thar earned patent term adjustment. See 37 C	COMMUNICATION.  r the provisions of 37 CFR 1.13 ate of this communication. sss than thirty (30) days, a reply he maximum statutory period w period for reply will, by statute, three months after the mailing	within the statutory minim	r, may a reply be tim um of thirty (30) days ( (6) MONTHS from	nely filed s will be considered tim the mailing date of this D (35 U.S.C. § 133).	ely. communication.				
1) Responsive to commun	ication(s) filed on								
		— is action is non-fin	al.						
	in condition for allows	ance except for for	mal matters, p	rosecution as to	the merits is				
3) Since this application is closed in accordance w	ith the practice under	Ex parte Quayle, 1	935 C.D. 11, 4	453 <sub>.</sub> O.G. 213.					
4)⊠ Claim(s) <u>1-14</u> is/are per	nding in the application	٦.	•						
4a) Of the above claim(s	) is/are withdra	wn from considera	tion.						
5) Claim(s) is/are al									
6)⊠ Claim(s) <u>1-14</u> is/are reje			٠						
	The second secon								
8) Claim(s) are sub	ect to restriction and/	or election requirer	nent.						
Application Papers	•								
9) The specification is obje-	cted to by the Examin	er. 							
10)☐ The drawing(s) filed on _	is/are: a)□ acce	epted or b) object	ed to by the Ex	aminer. Can 37 CER 1 850	(a)				
Applicant may not reque	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.65(a).								
11) ☐ The proposed drawing c	11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
	If approved, corrected drawings are required in reply to this Office action.								
1	12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119	and 120			(a) (d) or (f)					
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)⊠ All b)□ Some * c)□ None of:									
1. Certified copies of the priority documents have been received.									
2. Certified copies of the priority documents have been received in Application No									
1' 1' 1' E	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
* See the attached detailed Office action for a list of the section 14. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application									
The translation of the foreign language provisional application has been received.									
a) in the translation of 15). Acknowledgment is ma	a) The translation of the foleigh language provisional applications of the foleigh language provision applications of the foleight language provision applications of the foleigh language provision applications of the foleigh language provision applications of the foleigh language provision applications of the foleight language provision applications of the foleigh language provision application a								
Attachment(s)		4)	Interview Sumn	nary (PTO-413) Pap	er No(s)				
Notice of References Cited (PTO-     Notice of Draftsperson's Patent D     Information Disclosure Statement	rawing Review (PTO-948)	5) 6) _	Notice of Inform	nal Patent Applicatio	n (PTO-152)				

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### **DETAILED ACTION**

### **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 7-8 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 5, the use of "dense" and "sparse" is found to be vague and indefinite because it is unclear as to what would actually constitute either "dense" or "sparse".

Claims 7-8 are found to be vague and indefinite because they recite method phraseology which fails to properly further limit the structure within the apparatus claims.

With respect to claim 11, "the fiber-shaped base members" lack proper antecedent basis.

Those claims not specifically referred to, are included in this rejection because they depend from claims containing rejected subject matter.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishii et al., U.S. patent No. 6,468,428 B1.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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Claims 1-3, 7-8 and 11-14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Peill et al., U.S. patent No. 5,875,384.

Peill et al., teach a photocatalyst filter bundle formed by a plurality of fibers with a photoconductive core and having a photocatalyst layer thereon. The fibers are bundled together with spaces therebetween to facilitate fluid flow therethrough in either a parallel or perpendicular direction for the treatment of that fluid.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne M. Thornton whose telephone number is 703-308-3914. The examiner can normally be reached on Mon.-Wed. 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 703-308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

KRISANNE THORNTON PRIMARY EXAMINER

July 14, 2003